

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

Kindly delete Claims 1-9 and add the following new claims:

- 1.-8. (Cancelled)
9. (New) A gel composition comprising a reaction product of a polyol and a polyisocyanate, and at least one of a pyrogenically produced oxide of a metal or a pyrogenically produced oxide of a metalloid.
10. (New) The gel composition according to Claim 9, wherein the pyrogenically produced oxide is prepared by flame hydrolysis.
11. (New) The gel composition according to Claim 9, which contains a physical mixture of said pyrogenically produced oxide of a metal and said pyrogenically produced oxide of a metalloid.
12. (New) The gel composition according to Claim 9, which contains pyrogenically produced mixed oxides of at least one of a metal or metalloid.
13. (New) The gel composition according to Claim 9, wherein the pyrogenically produced oxide is a member selected from the group consisting of silica, aluminum oxide, mixed oxide of silica and aluminum oxide, titanium dioxide, and mixed oxide of titanium dioxide and iron oxide.

14. (New) The gel composition according to Claim 9, wherein the pyrogenically produced oxide is silica that has been surface treated with a member selected from the group consisting of dimethyl dichlorosilane, trimethyl dichlorosilane, hexamethyldisilazane, polymethyl siloxanes and alkylsilanes.

15. (New) The gel composition according to Claim 9, wherein said pyrogenically produced oxide is hydrophobic.

16. (New) The gel composition according to Claim 9, which additionally contains at least one member selected from the group consisting of barytes, chalk, gypsum, kieserite, sodium carbonate, titanium oxide, quartz sand, kaolin, carbon black and glass beads.

17. (New) The gel composition according to Claim 9, which additionally contains a powder selected from the group consisting of polystyrene, polyvinyl chloride, urea-formaldehyde, polyhydrazodicarbonamide and mixtures thereof.

18. (New) The gel composition according to Claim 9, which additionally contains a member selected from the group consisting of a coloring agent, water-binding agent, surface active agent, an extender agent and a plasticizer.

19. (New) The gel composition according to Claim 9, which contains up to 60% by volume of the gel of air or other gas.

20. (New) An article of manufacture which is a two-dimensional or three-dimensional contoured part made of the gel composition according to Claim 9.

21. (New) The article of manufacture according to Claim 20, which is provided with a one-sided or all-round coating, covering or sheathing.

22. (New) The article of manufacture according to Claim 21, wherein an elastic, extensible sheathing is provided.

23. (New) The article of manufacture according to Claim 20, which is a seat cushion, gel cushion for shoes, back cushion, head or arm rest, mattress, mattress inlay, mattress cover, support or covering for protection of body parts, face mask, a prosthesis support, or instrument panel in a vehicle.

24. (New) A process for the production of a gel composition comprising forming a mixture of

- a) at least one polyisocyanate and
- b) at least one polyol component and
- c) at least one pyrogenically produced oxide of a metal or metalloid

and allowing the mixture to gel.

25. (New) The process for the production of the gel composition as claimed in Claim 24, wherein the isocyanate functionality and the functionality of the polyol component is at least 5.2.

26. (New) The process for the production of the gel composition as claimed in Claim 24, wherein the isocyanate functionality and the functionality of the polyol component is at least 6.5

27. (New) The process for the production of the gel composition as claimed in Claim 24, wherein the isocyanate functionality and the functionality of the polyol component is at least 7.5.

28. (New) The process as claimed in Claim 24, wherein the polyol component consists of a mixture of

a) at least one polyol with a hydroxyl number below 112 and

b) at least one polyol component with a hydroxyl number in the range from 112 to 600,

the weight ratio of the component a) to component b) being between 90:10 and 10:90, the isocyanate index of the reaction mixture being in the range from 15 to 59.81, and the mathematical product of the isocyanate functionality and functionality of the polyol component being at least 6.15.

29. (New) The process as claimed in Claim 24, wherein a mixture of

a) at least one polyisocyanate and

b) a polyol component consisting of

at least one polyol ( $b_1$ ) with a hydroxyl number less than 112 and

at least one polyol ( $b_2$ ) with a hydroxyl number in the range from 112 to 600 and

c) optionally a catalyst for the reaction between isocyanate groups and hydroxyl groups and

d) optionally, at least one filler or additive are allowed to gel

the weight ratio of the component (b<sub>1</sub>) to component (b<sub>2</sub>) being between 90:10 and 10:90, the isocyanate index of the reaction mixture being in the range from 15 to 59.81, and the mathematical product of the isocyanate functionality and the functionality of the polyol component being at least 6.15.

30. (New) The process as claimed in Claim 24, wherein the polyol component consists of at least one polyol with a molecular weight between 1000 and 12000 and an OH number between 20 and 112, the mathematical product of the functionalities of the polyurethane-forming components being at least 5.2, and the isocyanate index being between 15 and 60.

31. (New) The process as claimed in Claim 24, wherein as isocyanates is represented by the formula



in which

n is 2 to 4, and

Q denotes an aliphatic hydrocarbon radical with 8 to 18 C atoms, a cycloaliphatic hydrocarbon radical with 4 to 15 C atoms, an aromatic hydrocarbon radical with 6 to 15 C atoms, or an araliphatic hydrocarbon radical with 8 to 15 C atoms.